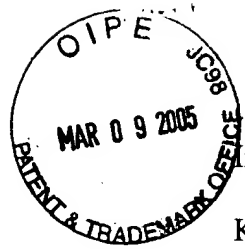


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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



In re application of : **Confirmation No. 1004**  
Kenji OSHIMA : Docket No. 2001-1135A  
Serial No. 09/935,661 : Group Art Unit 1714  
Filed August 24, 2001 : Examiner Callie E. Shosho

ELECTROSTATIC INK JET INK AND  
METHOD OF CONTROLLING  
ELECTROSTATIC CHARGES OF  
COLOR MATERIAL IN THE INK

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**RESPONSE AFTER FINAL REJECTION**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**RESPONSE UNDER 37. CFR 1.116**  
**EXPEDITED PROCEDURE**  
**EXAMINING GROUP** 1714

Sir:

Responsive to the Office Action of December 9, 2004, Applicant submits the following remarks in support of the patentability of the presently claimed invention over the disclosure of the references relied upon by the Examiner in rejecting the claims. Further and favorable reconsideration is respectfully requested in view of these remarks.

Thus, the rejection of claims 1, 3-5, 7 and 8 under 35 U.S.C. § 102(b) as being anticipated by Swift et al. taken in view of the evidence in Takao et al. is respectfully traversed.

Initially, Applicant takes the position that the Swift et al. reference represents nonanalogous art, and therefore is inappropriate as a basis for rejecting the claims.

In this regard, referring to MPEP 2141.01(a), the determination of whether or not a prior art reference is nonanalogous art depends on the similarities and differences in structure and function/purpose of the inventions, and whether the inventions involve different fields of endeavor. Furthermore, a determination must be made as to whether the reference was reasonably pertinent to the problem with which the inventor was

concerned, i.e. whether one of ordinary skill in the art would reasonably be expected or motivated to look to the reference to solve the particular problem with which the inventor was concerned.

As applied to the present factual situation, there can be no doubt that the ink of the present invention has a different function/purpose than the ink of the Swift et al. reference, in that whereas the ink of the present invention is for an ink jet printer, the Swift et al. ink is for a lithographic printing process. Furthermore, the problem confronting the present inventor was to provide a color material coagulated type ink for an electrostatic head that enables stable and high-speed printing of high-density dots substantially free from ink bleeding, and also to provide a method of effectively controlling the electrostatic charges of the color material in the ink (page 7, lines 6-10 of the substitute specification). A person of ordinary skill in the art would not be reasonably expected or motivated to look to a reference concerned with a lithographic ink (Swift et al.) in order to solve this problem.

Accordingly, Applicant respectfully submits that the rejection is improper because it relies on nonanalogous prior art.

The Examiner takes the position that the recitation in the claims that the ink is suitable "for ink jet printer" is merely an intended use, which does not result in a structural difference between the presently claimed invention and the prior art. The Examiner states that because Swift et al. disclose ink identical to that presently claimed, it is clear that the ink of Swift et al. would be capable of performing the intended use, i.e. for ink jet printer.

Initially, Applicant again relies on the arguments set forth in the Response filed August 26, 2004.

The Examiner refers to MPEP 2111.02, stating that if the prior art structure is capable of performing the intended use, then it meets the claim. Further, the Examiner states that intended use statements must be evaluated to determine whether the intended use results in a structural difference between the claimed invention and the prior art. If such a structural limitation exists, the intended use recitation serves to limit the claim. As will be discussed in detail below, lithographic inks, such as that taught by Swift et al., are not capable of performing the intended use, and therefore do not meet the claim.

Further, structural differences clearly exist between lithographic inks and inks for ink jet printers. Lithographic inks have a very different viscosity than inks for ink jet printers, therefore making them incapable of use in an ink jet printer. For these reasons, according to MPEP 2111.02, the preamble statement reciting intended use in Applicant's claims must be considered a claim limitation. This limitation is clearly not taught by the cited references.

Additionally, contrary to the Examiner's assertion, the ink of Swift et al. is not identical to the ink claimed by Applicant. The Examiner admits that Swift et al. teach a lithographic ink, rather than an ink for ink jet printer. A lithographic ink (such as that disclosed by Swift et al.) differs greatly from the ink claimed by Applicant in the viscosity of the ink. Applicant again refers to the partial copies of references, attached to Applicant's prior response, which provide evidence that the viscosity of ink for an ink jet printer must be low in order to be functional in the ink jet printer. [See page 3, paragraph 3 of Applicant's Response filed August 26, 2004.] Therefore, the Examiner's statements that the ink of Swift et al. is identical to Applicant's claimed ink is unsupported and incorrect.

The Examiner acknowledges Applicant's argument that there is a difference between the ink of Swift et al. and the presently claimed ink for ink jet printer, in that the viscosities of the inks are very different. However, the Examiner states that the arguments of counsel cannot take the place of evidence in the record, and suggests filing a declaration or affidavit to support the arguments.

In response to the Examiner's suggestion, Applicant submits herewith a Declaration under 37 CFR § 1.132. The Declaration contains a Test Report showing the results of an experiment to determine whether a common lithographic ink can be used in an ink jet printer. Applicant acknowledges that he was unable to prepare an ink of Swift et al. However, Applicant chose one of the most commonly used lithographic inks, supplied by Toyo Ink Mfg. Co., one of the most commonly known ink manufacturers in Japan.

Swift et al. clearly disclose a lithographic ink, and Applicant's Declaration details an experiment attempting to use a common lithographic ink in an ink jet printer. As the results in the Declaration clearly demonstrate, a lithographic ink, as disclosed by Swift et

al., cannot be used in an ink jet printer. Therefore, the prior art structure is not capable of performing the intended use, as required by MPEP 2112.02.

Based on the above remarks, it is evident that a lithographic ink and an ink for ink jet printer are very different compositions. Additionally, it has been demonstrated that a lithographic ink, such as that disclosed by the cited reference, is not capable of performing the intended use of the claimed composition. Therefore, the preamble of Applicant's claims must be interpreted as a claim limitation, because it is necessary to give life, meaning and vitality to the claims, and it cannot be considered as merely reciting an intended use.

On page 4 of the Office Action, the Examiner draws attention to examples XL, XLI, and XLII of Swift et al., indicating that these examples do not disclose the viscosity of the ink. The Examiner notes that while the inks do contain polymer possessing high viscosity, these polymers are added to other ingredients, i.e. pigment, Magie oil, etc.; and that it is not clear how these ingredients would effect the viscosity of the ink.

However, with regard to the addition of pigment, this would clearly increase the viscosity of the ink. As noted in the first full paragraph on page 15 of the substitute specification, the color material increases the viscosity of the ink. With regard to the Magie oil, the examples of Swift et al. mentioned by the Examiner use such relatively small amounts of Magie oil that could not possibly reduce the viscosities of the vehicles (60% resin solutions) of Swift et al. (which as noted on page 3 of the Response filed August 26, 2004 are about 10,000 times or more the viscosities of ink jet printer ink) to a sufficiently low viscosity that would make the ink itself suitable for use as an ink jet printer ink.

For these reasons, the invention of claims 1, 3-5, 7 and 8 is clearly patentable over Swift et al. in view of Takao et al.

Applicant submits that the remarks, as well as the Declaration Under 37 CFR § 1.132, submitted herewith, do not present arguments which would require further search and/ or consideration. On the contrary, the Declaration is submitted in response to the Examiner's suggestion, and it refers to arguments which were previously made of record.

Applicant notes that claim 6 would be allowable if rewritten in independent form. However, based on the above remarks, the subject matter of claim 6 is allowable for the

same reasons the subject matter of claim 1 is allowable. Therefore, the objection to claim 6 is respectfully traversed.

In view of the foregoing remarks, it is submitted that each of the grounds of objection and rejection set forth by the Examiner has been overcome, and that the application is in condition for allowance. Such allowance is solicited.

Respectfully submitted,

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